## CAG Meeting

## Meeting of 6/16/2014

1. Meeting called to order at 6:40 pm by Chairperson Doug Clemens.

2. Roll call of Executive Board in attendance:

Chair: Doug Clemens
Co-Chair: Bob Nowlin

Treasurer: Rhonda Steelman Vernita Wilson Bill Wilson

3. Public Officials / Organizations in attendance or represented:

Ben Washburn, EPA Community Involvement Coordinator, Region 7

Daniel Gravatt, Environmental Scientist, EPA, Region 7

Jeffrey Field, Redial Project Manager, EPA, Region 7

David Hoder, EPA

Harvey Ferdman, Policy Advisor for Bill Otto

Kerry J. DeGregorio, Constituent Advocate, U.S. Sen. Roy Blunt

Jo Middleton, U.S. Sen. Claire McCaskill

Jeff Heater, MO State Congressman, Jill Schupp

Bill Ray, St. Louis County Executive Office

Michael Zlatic, PE, Environmental Administrator, St. Louis County Health

Ed Smith, Safe Energy Director, Mo Coalition for the Environment

Linda Eaker, Bridgeton City Council

Terrie Boguski, SKEO Solutions

Denise Jordan-Izaguierra – CDC/ATSDR

Matt LaVanchy, Assistant Fire Chief, Pattonville Fire District

Lorena Locke, DHSS

Michelle Hartman, DHSS

Robyn Kiefer, Project Manager - Hazardous, Toxic and Radiological Waste Branch

Kansas City District US Army Corps of Engineers

Jason Leibbert, Chief, Environmental Engineering Branch

Kansas City District US Army Corps of Engineers

Mike Peterson, St Louis US ACE

- 4, Nomination and Vote of new members: Rhonda Steelman nominated Kriss Avery, Sharon Kenny, David Kershman, Paul and Mary Meyer, Barbara Swanson, and Gwendolyn Verhoff for CAG membership as they met the eligibility requirements. Rhonda Steelman asked for voter approval, membership approved. Donna Klocke seconded. Motion carried.
- 5. Approval of minutes from May CAG meeting:

Rhonda mentioned one correction: Michael Zlatik was erroneously listed as in attendance but was not there. John Haasis was in attendance in his place.

Doug Clemens presented May 2014 meeting minutes for review. Debi Disser motioned to approve, Rhonda Steelman seconded, motion passed. Minutes accepted into record.

Executive Board Report: Doug Clemens reported the Executive Board met to plan upcoming meeting and discussed May Executive Board meeting. Doug then re-read the resolution from October 21, 2013 concerning the trench to be built and the concerns related to that.

Rhonda Steelman presented Treasurer's Report for the month ending May 31, 2014:

## Receipts

| Balance on hand 3/31/2014 | \$383.97 |
|---------------------------|----------|
| Donations                 | \$ 0     |
| Disbursements             | \$ 0     |
| Balance on hand 5/31/2014 | \$383.97 |
| Montgomery Bank           | \$360.00 |
| PayPal                    | \$ 23.97 |

Doug shared that he had contacted the St Louis County Emergency Management Team and they will be here at the next meeting to talk about contingency and safety plans for the site. Missouri DNR has been contacted repeatedly but haven't responded or sent a contact to the meetings. TASC will be provided to help in giving information for newer attendees to bring them up-to-date. Ben Washburn provided an ASL interpreter has been provided tonight, as requested. He discussed information regarding machines being used by both the EPA and the St Louis MOMs and how they are similar.

What is the minimal level of detectable activity for the machine EPA was using at BMAC and what is the remediation level?

## 6. Call for New Business Public Officials introduced themselves.

Ed Smith from MO Coalition for the Environment discussed some off-site testing previously done by the DNR. A screen presentation provided information regarding this 2005 DNR Offsite Testing. There are questions related to the testing done. Discussion related to the background numbers compared to the thorium 230, 228 and 232 numbers from the testing. The FUSRAP removal level for thorium 230 is 14 picocuries plus background. It is above FUSRAP remediation levels. We would like the EPA to talk about the picocuries levels.

Joe Passanise asked about the TASC handouts wanting someone to make a presentation to explain the materials. Doug said those will be discussed at a future meeting due to time restraints of this meeting. TASC is given to us by the EPA, an impartial engineering firm which helps us understand the science, to understand the reports we are getting, and they offer fact sheets that will help us understand the information. They will answer any questions we have.

Presentation from EPA: Dan Gravatt proceeded with responses to the Q & A provided at or after the last CAG meeting.

Dan began by answering Ed Smith's question above related to the numbers in the DNR report. Dan said he was not clear at the last meeting or he misspoke as to what he was comparing the

DNR numbers to when he talked about it the last time. Ed correctly identified in the Supplemental Feasibility Study Work Plan the true background numbers that were calculated and they are lower than some of the numbers that we got from the DNR study. Dan meant to refer to the so-called Clean-up Standards set in the Supplemental Feasibility Study Work Plan for the excavation remedy alternatives and those were set at 5 picocuries plus background based on element rather than by isotope. When you're cleaning up, you clean up to the element's total value. For the complete RAD removal were 7.9 picocuries per gram for radium 7.9 picocuries per gram for thorium and 54.5 picocuries per gram for uranium.

Ed: There was one that had 8.8 picocuries.

Dan: For backgrounds, there is an inherent variation there, inherent uncertainties. You would have to do a lot of statistical analyses to get a more accurate number.

Dan Gravatt read the questions presented to the EPA and gave responses (copy of which should be made available by EPA). At conclusion of this presentation, the floor opened for more questions.

Harvey Ferdman followed up on Ed's original question. You said 7.9 was the remediation number and talked about the issues of inherent statistical errors. The statistical error was 1.56 which means that the range of that rate of 8.8 would be from 7.25 to 10.27. This puts it potentially scientifically over the 7.9 figure. What sort of follow-up that EPA will propose to do to address that particular sample?

Dan: I don't know the answer at this point but will ask Ben to add that to our list that we will talk about in the future. This question will probably be passed on to our radiation experts.

Dawn Chapman: The 2005 data, the soil samples, have been there for almost a decade. Is that not something that the EPA would already have an answer to by now? So you're saying that it is off-site but that it is not above the remediation level. That is clearly above background.

Dan: EPA didn't know about this data until earlier this year. DNR did this survey on their own as part of their evaluation of the FUSRAP problem and for whatever reason, we were not aware of it.

Dawn: That's why it was not stamped SUPERFUND?

Dan: Yeah, the DNR did this data for their own purposes and then when it came up more recently, we asked for the data as you did as well. As far as comparison to the background, whether it is offsite, what we have from the DNR, that's all we have. We can't independently verify the information but we have no reason to doubt their procedures. They seem to have done it in the proper way.

Dawn: So that's scientifically sound, in your opinion?

Dan: Yes.

Dawn: So it is off-site?

Dan: Yes but if you'll notice...now think about this, there are other sources of radiation in the environment. Just because it's there doesn't necessarily mean that it migrated off-site.

Doug: One of the things that we have seen going over document after document is that the levels of the waste of the RIM in Westlake Landfill are at the same proportion of what we are finding outside. I guess it would be a stretch of convenience that Mother Nature put background radiation at the same proportion as we find in the Westlake RIM. That's a concern.

Dan: I understand that and that is something we will have to look into and get back with you.

Joe Passanise: I'm curious about background radiation -- that does not includes both manmade and natural contributions?

Dan: Yes it includes both natural and man-made contributions.

Joe: Okay, how many picocuries does it take to harm the human body? What are the picocuries in the area we are talking about?

Dan: As far the human health question, I have to defer that to Denise (Jordan-Izaquirre). As far as what the picocuries per gram are in various soil and waste samples around the site, there are many samples that are listed in various documents available for you to peruse.

Joe: I'd like to hear the answer to the first question.

Denise Jordan-Izaguierra: Dr. Sharp sent a very long email explaining this.

Joe: Can you give me the short version – does it hurt the human body in this area?

Dawn: 8.81 – Is that harmful to the human body?

Denise: I don't know that science shows us. There is some damage done but we can't measure and we don't see it.

Joe: You mean to tell me that this is the EPA and you can't tell me how many picocuries can hurt the human body, no matter where we are in the world?

Ed Smith: The National Academy of Sciences has what's called the linear note threshold model for risk and exposure of ionizing radiation which means exposure equals risk. One of the worst ways to be at risk is to inhale or ingest radioactive ionizing radiation and this is the standard that the EPA uses.

Joe: What is the number?

Ed: There is no magical number – it is "exposure equals risk".

Doug: There is no safe/unsafe level ever been set by any government about exposure to radiation, because we don't understand how it works in the human body. We have an idea as to what's bad for you.

David Kershman: The levels we are talking about aren't definitively dangerous. They are still casting. Deterministic means if you have this amount of exposure, this will happen. You get this range and these effects will start happening. What we're looking at is still casting, which means as you increase the amount from zero any amount, there is an increased risk of cancer.

Joe: We have people with nosebleeds, cancer, you know what the statistics are. Why can't you just get honest and tell me -- What is the problem and can you fix it?

Denise: It's not one exposure. It depends on the length of time you are exposed, if you just standing there or breathing it in, etc.

Joe: Can you chart something that says if you are standing in Bridgeton for a week, for a month, so come up with a chart?

Denise: I will put together a chart showing exposure dangers.

Joe: If we are going to continue to live in the neighborhood, how long is it going to be before we are killing ourselves?

Doug: There is no one telling us a solid number left or right. Exposure is cumulative, every time you get an x-ray, every time you take a flight, every time you get sunburned, every time you run barefoot across a pile of radioactive waste, this accumulates.

Tara: The testing done in the 50's in Nevada, testing after nuclear accident in Nevada, cows and animals there. This level, this long, can kill this cow? Can you have a chart to be this close to this for this exposure?

Doug: I think you are thinking about radioactive poisoning.

Denise: You can't compare what happened in Arizona or Hanover, those were bombs. The radiation here was not the same as there.

Tara: Residents were dying from facial cancer, colon cancer, and others. There were statistics given out then. This is 60 years later, why can't we have some statistics on this?

Doug: Let's go onto another topic they can answer.

Joe: You have a great bit of resources, you should be able to provide an answer. I want an answer at the next meeting.

Doug: Send your question to me in writing and I will pass on to Dan.

Harvey: Please include respirable levels for those in audience who are dealing with this. One of the concerns in this community is that the materials in the waste was ground really fine and can be inhaled.

Base line – why is the supplemental feasibility sub-baseline number not going to be used and figure not being used and the new figure. Are the PRP's and the EPA going to negotiate that number or is it going to be based on scientific study?

Dan: Those numbers were agreed upon for the supplemental feasibility study. The background number may be modified in some way. It depends on the number of samples, the characteristics, and the statistics. There are several ways to figure a background study and I'm not a statistician.

Donna Klocke (question for Denise): In looking at the comparison value lines on your chart for the REL's and MRL's. For the total VOC's, from the TO15, acute MRL 5000 parts per billion, it said that was over 1-14 days so my question is whether that was for 24 hours or 336 hours? On your guidelines in response to landfill fires' concentrations exceeding 1 to 5 PPMs over background of concern for the residential area, what is your total VOC background? Has it been determined and how will it be determined?

Doug asked Denise to come to microphone and asked: Wasn't EPA going to be monitoring the VOC's during the construction?

Dan: Yes, the five air stations that EPA has set up around the site will do VOC's in air by TO15's as described in our quality assurance project plan for that work which is on our webpage.

Donna: I was just looking at her values for the CBC values. The ATSDR was the only one who had a total VOC of 5000 parts per billion. Somebody's going to have to establish a background for total VOC's so they can figure out if it's higher than that.

Dan: That's one of the reasons we have installed those air monitors now is so that we can establish the numbers before the construction takes place so we can establish is for collecting that data over the next few months so that we can determine the impact the actual construction is having.

Donna asked a question about breaking down the samples to do more laboratory analyses.

Denise: There has been some dioxin tested for before but not sure if there is a plan to test for more.

Donna: They were elevated under the flexible liner at the base of the east slope by the Boenker Farm at the lower border of the liner and half-way up the slope.

Denise: It would make a difference if it was a soil sample or an air sample. The 1 part per billion has changed to 75 parts per trillion.

Doug: Logic in terms of absorption, one part per billion is now 75 parts per trillion. One part per billion in soil is a remediation level. I would assume that an airborne remediation level would be much lower than that given that the intake of air affects our blood-brain portion of our body. Do you know what the remediation level for airborne dioxin might be?

Denise: No.

Doug: Would you find out that answer for us? One of the concerns we have is the VOC's coming out of this landfill.

Beth: Are you going to dig into RIM during the construction of the barrier?

Dan: To the best of my knowledge, our intention is to not dig into RIM.

Mike Evans: first time attending CAG meeting. I'm hearing about tests done in 2005. Why hasn't it been done since then? You are not using 10 year old technology, using a 10 year old laptop, a 10 year old car...why is it that you are not testing with modern technology?

Dan: The DNR did the testing with modern technology. The science behind the tests hasn't changed. The technology for the radiation technology sufficiently low detection limits then should be accurate enough for now.

Debi: I live in Spanish Village. This whole meeting – we don't know a safe number to know whether we are safe or not, so if we don't know that, how are the emergency people going to know when to let it's safe or not?

Doug: When someone stumbles into something that might be harmful to our health, it's already too late. That's why we are asking for people to be relocated.

Dan: I can't speak for first responders so I hope you have to a chance to speak to them.

Donna Klocke: When are you going to notify the first responders?

Dan: The data that we are going to collect from our air monitors and the monitors on sight will be looked at during the construction as soon as it is available. The workers will have monitors to check during the work. There are no monitors that detect things in real time. There is no technology that can detect down to real time.

Denise: With the exposure during the construction, you don't think that's too late?

Denise: We can't say what triggers what response to your body?

Rebecca Tobara: Are you going to let us know what these levels are so we can know when it's safe and when it's not safe?

Tara: There's notification to public when smog is a certain level.

Doug: Response times for detectors out there. Can you give us information about what these machines can do for us? How soon are the people residing close to the landfill going to be informed? How fast are you notifying them of danger?

Dan: Some instruments that can tell you most about exposure do not report within real time but they don't have the sensitivity to tell if you have been exposed to a certain amount. The method that will be used to notify the public and first responders?

Ed: We do have trained workers on the work site.

Dawn: Had you looked at the 2005 report or was this was response to us that brought this to your attention? Was it us or the Attorney General?

Dan: This was something we looked into as a response to the questions from the discussions during the meetings until earlier this year. We started finding these references and brought them to your attention. You brought the 2005 report to our attention.

Dawn: What about the 14 soil samples, were they elevated, above background – you said no. Any place in Bridgeton, if this is off-site, above background, we want to know what you are going to do about this when we have found that it is off site. What are you going to do about this now that you know it is off-site? Are you going to guestion us when we check our municipal

ball field? Are you going to question the businesses when they get their own results because they are scared, because they don't trust you?

Dan: We'll get an answer back to you.

David Blackwell: Do you have a route for the barrier yet?

Dan: No, not yet, that is still being worked on.

Matt: What type of testing are you doing for the route? What type are you doing for this 3<sup>rd</sup> round of testing?

Dan: For this third round of testing to determine route for the barrier, the point of that sampling is not only to collect the samples but to also measure the land for its stability.

Deb – (see video for more details) Deb questioned as to whether we could know what the studies were, even if we could not know the results.

Dan: What the studies were that Remedy Review Board asked to be done during their consultation. The work plans that the PRP's have provided so far are being released today so you can see what the NRRB's asked for and the PRP's in response.

Linda Eaker: I don't feel comforted listening to the discussion going on. It sounds like its taking way too long, sat too long, and you are trying to make up for lost time. Is it the right thing to be making the barrier? Maybe we should be spending this time in getting it moved. What can you do to make these people feel better?

Dan: We are trying to keep you informed of what we are doing and to answer your questions. There are no perfect solutions to anything at this site. Everything we do can have positive and negative aspects.

David Kershman: We do keep finding these random spots here and there. We don't seem to have a good method of determining where all the radioactivity is. The concern is that we keep running into these sights with much higher numbers than background. I was privy to a conversation when I worked for FUSRAP, one of their environmental remediation groups said "don't keep testing on 70, or we will have to buy the entire corridor." I have trouble believing we don't have enough information to remediate just along the highway or the haul routes on the route of 70, because I have trouble believing it didn't blow in other places.

Doug: The haul routes are important. We are finding the same mix of things off-site and nobody is explaining why it's there.

David: I know it is on the haul routes because I was there when they were doing the testing.

Dan: Those haul routes are a part of the FUSRAP sight. Those areas have been worked on by FUSRAP for years.

David: What are you doing to find out where this material is in our area?

Doug: What is EPA doing to locate where the waste is off-site and where does the line begin and end with regards to the FUSREP?

Dan: The haul routes are FUSRAP and the boundaries are set.

Doug: Why is EPA at BMAC? Why wouldn't FUSRAP go there looking at BMAC?

Dan: Since public concern was very high and the city was losing business and residents are concerned, the fastest way to do was to do that ourselves.

Mike Peterson: CORP St Louis District. Not all routes between Westlake and the FUSRAP area are part of the FUSRAP. Testing has been done there. Are we talking about routes around the vicinity of the property or around St Louis?

Doug: You have pointed out where you responsibility lies. This becomes no man's land. Who is going to step up and deal with this stuff?

Rebecca Tobara: What I'm hearing is there is so much unknown, we don't have numbers, but there are random amounts of hot spots, but we want to build this trench, this wall, to open things up, expose things more, but we don't know what a safe level is, but you're wanting us to continue to live there. Wouldn't it be a better idea to move us out while you do the work? Wouldn't it be safer for us to be moved out and not get more cancers in our own Bridgeton area which is connected to it?

Dan: Relocations – EPA doesn't have the ability to compel re-locations. I'm not sure we have the ability to compel buy-outs?

Rebecca: How do we keep making that known that these health risks are here and that to get safety, we should be actually moved?

Doug: EPA has relocated individuals and there has been a buy-out. Attorney General is working very hard to do something. Please let our Attorney General and elected officials know where you are with this. It seems that a buy-out could be a simple solution to this complex issue.

Tara: This happened in California, they have to give numbers – EPA has taken an oath to protect people. It does make a difference when the government gets involved and they see that this is not a safe place -- that it should be bought out. It's about the money. All the businesses down the Rock Road. People here aren't going to be naïve.

Beth: You said it wasn't off-site. Now you are saying that you feel comfortable with the findings of 2005 so why should we do more off-site testing? We have proven that it is off-site and you admit that now. You say we should trust 2005 results. Are you going to do testing off-site in Bridgeton for 2014?

Dan: I don't know.

Beth: So we're going to have to do it which is not going to look good.

David Kershman: EPA definitely has the ability to make it prohibitive for businesses to no longer continue to operate as they are. You have the ability to fine. You have humongous fines you can pose on companies. You have the wherewithal to find cheaper solutions.

Doug: In looking at other Superfund sites, this site seems anomalous. Why does EPA treat this site differently from other sights within its purview?

Dan: I don't know how to answer that question, you have to give me specifics about what you think is different. Send me the question with specifics.

Doug: I will follow up with specifics and look forward to EPA's response.

Joe: The urgency of this issue can be felt by you, Dan. There is a vacant house right near Westlake where you and your family could come and live here for several months this summer and see what your skin is doing. Would you occupy a house here for 3 months with your family?

Dan: I know you have been dealing with some tremendous odors. I feel for you because of the odors here.

Female voice: Nobody will buy our houses because of the odors. Because of the smells and the news, you couldn't give them away. We can't sell our homes.

Doug: That's where our elected officials and the Attorney General come in to play. Keep making your representatives aware of your feelings about this. I think most of us here agree that a buy-out is the best solution.

Ed Smith: The smell and odor-related issues from the fire, the State of Missouri is in charge of that.

Female voice: We didn't even find out about the benzene.

Ed: Contact the DNR and the Attorney General.

Doug; I understand the benzene was found by accident? By the way, you have been breathing benzene for the last five hours. The benzene was found by accident? Can we correct that as we move forward?

Dan: It was an MDNR system that found. It. I don't know the specifics.

Doug: I would like to have a motion to close. Next meeting is July 21<sup>st</sup>. The deadline for any questions will be July 8<sup>th</sup>.

Motion to close meeting by Rhonda Steelman, seconded by Paul Meyer. Meeting adjourned. Meeting Closed. 72 in attendance.